Cambridge National

ICT

Level 1

Unit **R001/01:** Understanding Computer Systems

Mark Scheme for January 2013

Oxford Cambridge and RSA Examinations

OCR (Oxford Cambridge and RSA) is a leading UK awarding body, providing a wide range of qualifications to meet the needs of candidates of all ages and abilities. OCR qualifications include AS/A Levels, Diplomas, GCSEs, Cambridge Nationals, Cambridge Technicals, Functional Skills, Key Skills, Entry Level qualifications, NVQs and vocational qualifications in areas such as IT, business, languages, teaching/training, administration and secretarial skills.

It is also responsible for developing new specifications to meet national requirements and the needs of students and teachers. OCR is a not-for-profit organisation; any surplus made is invested back into the establishment to help towards the development of qualifications and support, which keep pace with the changing needs of today's society.

This mark scheme is published as an aid to teachers and students, to indicate the requirements of the examination. It shows the basis on which marks were awarded by examiners. It does not indicate the details of the discussions which took place at an examiners' meeting before marking commenced.

All examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes should be read in conjunction with the published question papers and the report on the examination.

OCR will not enter into any discussion or correspondence in connection with this mark scheme.

© OCR 2013

Annotations

Annotation	Meaning
✔	Tick
✘	Cross
[BOD]	Benefit of doubt
➕	Good response/positive
[1+1]	(1+1) award 2 marks
[2+2]	(2+2) award 4 marks
[NE]	Not enough

R001/01   **Mark Scheme**   **January 2013**

SECTION A

This section relates to Scenario 1 of the pre-release (Steve Jones, the Club DJ).

Question			Answer	Marks	Guidance
1	**(a)**		TWO from: • Keyboard (1) • Mouse (1) • Touchpad (1) • Tracker ball (1) • Microphone (1) • Sip and puff device (1) • Head pointer (1) • Graphics tablet (1) • Touchscreen (1) • Remote control (1).	2	Any suitable input device.
	(b)		ONE from: • Speakers/headphones (1) • Monitor/screen/VDU (1).	1	
	(c)		TWO marks available for any TWO suitable formats. eg • Wav (1) • AIFF (1) • AU (1) • PCM (1) • ACC (1) • AAC (1) • MID (1) • OGG (1) • MP3 (1) • MPEG-4/MP4 (1).	2	Question asks for file types. This therefore excludes general descriptions – such as 'compressed' and 'uncompressed'. This list is of the major file types. This list is of file extensions. Accept FLA as there are two types of FLA file, one of which is an audio file type.

Question			Answer	Marks	Guidance
	(d)	**(i)**	ONE from: • CD/DVD (1) • Blu-Ray (1) • SD Card (SDHC) (1) • <u>External/portable</u> hard drive (1) • Memory stick/USB pen (or equivalent eg Flash drive/thumb drive) (1) • MP3 player (1) • Smartphone (1) • Cloud or commercial aspects thereof.	1	Accept iPod, phone. Not USB/MP3 on its own.
		(ii)	TWO from eg Generic answers: • Sufficient capacity (1) • Ability to reuse (1) • Robust/durability (1) • Portability/small size (1) Specific answers: • Low purchase cost (for DVD, Blu-Ray, SD card, USB memory stick) (1) • Always there, do not have to carry it (Cloud) (1).	2	Specific answers must match 1d(i). But generic answers can be awarded even if 1d(i) is incorrect.
2	**(a)**		ONE from: • Word Processing (1) • Desktop publishing (DTP) (1) • Spreadsheet (1).	1	Accept commercial trade names.
	(b)		Printer	1	

Question			Answer	Marks	Guidance
	(c)		TWO from: • (Name of) the song (1) • Artist (who performed the song) (1) • Year of release (1) • Version (candidate may stipulate CD version for example, or 'house mix' etc) or equivalent concept. (1)	2	This is not an eg list. Not writer of song.
	(d)		TWO marks for one paired answer. eg • Paper based requires a pen (1) and not many people take a pen to a nightclub/Steve would have to provide a pen (1) • Paper and/or ink (either answer) is damaged by liquid (1) of which there is likely to be some at a club (1) • Ink could be smudged if becomes wet (1) and someone could easily spill liquid (1) • It could be lost (1) because people might take it away/it may be passed around the club (1) • People may not write clearly (1) and so Steve will be unable to read the writing (1) • It will be dark (1) and so people would not be able to see (1).	2	Only award Disadvantages. Explanation could be a reason or a consequence.
	(e)		TWO marks for each full description. Marks must be awarded as part of a paired answer. eg • Steve could set up an email account (1) to which people could send emails (1) • Steve gives out his mobile number (1) so the audience can text (1) • Steve could set up an online user form (1) that people could fill in (1) • Steve could set up a social networking (accept named sites) account (1) that people could use to give details (1) • Steve could set up a (Smartphone) App (1) for people to download/with a list of songs/ with a submit button (1).	4	One mark for what Steve does and one mark for how used. Do not award marks which repeat the question ie 'To request a song'.

Question			Answer	Marks	Guidance
3			ONE mark for identifying the action, plus ONE mark for the explanation. eg • Check whether copyright applies to a track (1) as some tracks are not covered/copyright free (1) • Seek permission to use the track (before using it) (1) from the copyright holder/the artist (1) • Check whether the track is recognisable (1) as unrecognisable tracks are not covered (1) • Acknowledge the song/original artist (1) any acceptable method (1) • Payment of fees (1) if requested (1) • Purchase the track (1) ensuring it's a legal copy (1) • Copyright holder may place conditions/may say no (1) which he has to follow (1).	6	ONE mark for identifying the action, plus ONE mark for the explanation. Mix and match points and expansions acceptable.
4	**(a)**		TWO marks for a point and explain answer eg • A wireless microphone is mobile (1) and so Steve could use it to go into the audience/pass to someone else (1) • A wireless microphone does not have a lead (1) so Steve does not have to worry about pulling wires out/wires becoming entangled/trip hazard (1).	2	Accept answers why you would not need a wired microphone.
	(b)		TWO marks for a point and explain answer eg • A wired microphone is a physical connection (1) so data transfer is fast/less chance of interference/stronger signal (1) • A wired microphone does not need batteries (1) and so it is more reliable/will not fail (1).	2	Accept answers that are based on why you would not need a wireless microphone.

SECTION B

This section relates to Scenario 2 of the pre-release (Nico Mallett)

Question			Answer	Marks	Guidance
5	**(a)**		Award first mark for identifying the way, with up to two marks for the explanation of why the action needs to be taken. eg Resize the graphic (1) because digital camera images are very large/larger than needed on a webpage (1) so they need a lot of data/larger file size than necessary (1) so make smaller so that will download more quickly (1) Change the colour on the image (1) Image may be too dark (1) therefore the DJ cannot be seen (1) making the image lighter means that the DJ can be recognised (1) Crop the image (1) Image may be in a live situation/may include too many people (1) Needs to show a (clear) shot of the DJ (1) So extra people/detail etc are cut out of it (1)	6	The answer may be found in the explanation if the Way is too vague. Explanation can be considered if Way is wrong. Do not accept the use of the same tool for different uses. Where this happens consider both and award the set of paired answers that scores the best mark.
	(b)		<table><tr><td>User form feature</td><td>Describe the purpose of this feature</td></tr><tr><td>Radio button</td><td>The user can click this to select (1) one option of a group (1)</td></tr><tr><td>Text field</td><td>The user can type directly into this (1) to add free text (or example thereof) (1)</td></tr></table>	4	
	(c)		TWO marks available: By restricting the type of data (1) that is entered, the data is more likely to be the data you need (for the calculation/ for the analysis/ to identify the request) (1)	2	One mark for what validation does, or an example and the second mark for stating why this is appropriate.

Question	Answer	Marks	Guidance
6	**Level 3 (7–9 Marks)** There will be an excellent understanding of the question, with a clear explanation of the how features of an online calendar can help Nico to run the business and specifically avoid the chance of cancellation of events/ double bookings being made. The discussion of both issues will be balanced. The answer will be in the context of the question. Subject specific terminology will be used correctly. **Level 2 (4-6 Marks)** There will be a good understanding of the question, with a reasonably clear explanation of the how features of an online calendar can help Nico to run the business and specifically avoid the chance of cancellation of events/ double bookings being made. The explanation may concentrate more on either aspect. The answer will be in the context of the question. There will be some use of subject specific terminology. **Level 1 – (0-3 Marks)** There will be a limited understanding of the question. The answers provided will be one sided, vague and not necessarily be linked to the context in the question. Answers may be a list of features, rather than a structured argument.	9	Areas for consideration may include: • Bookings have been cancelled because either the DJ or Nico was unaware of the other/clashing booking. • Bookings have been cancelled because DJs have forgotten to attend. • Online calendars can be shared between two users, both of whom can add to and view bookings. • Online calendars allow the user to add coloured/keyed blocks to show what the time block is for. • Reminders can be set up for events. • Reminders can be set to go off at different stages before an event. • Notes can be added to events/blocks. • Online calendars include a messaging system. • The main cause of cancellations is double bookings. • Search facility. • Ability to access from anywhere.

Question			Answer	Marks	Guidance
7			TWO marks for each of three matched answers: Use of eg • Modelling (1) – you can change figures to predict results (1) • Goal seek (1) so that variables can be changed to achieve an outcome (1) • Graphing (1) so that results can be compared visually/trends identified (1) • Auto-update (1) allows Nico to change figures and results will change (1). General eg • Data can be stored on this software (1) in a suitable format/for future use (1) • Nico's fee is a percentage (1) and spreadsheet software has a set format for this (1) • Spreadsheet software allows calculations to be made (1) from figures that can be entered by the user/using formulas (1).	6	Accept other features of a spreadsheet with reasonable explanations.

Question			Answer	Marks	Guidance
8	(a)		Data Protection (Act) DPA	1	
	(b)		TWO marks available for a two part description: For **serious** breaches (1) organisations can be made to pay (1) up to £500,000 (1) She can be prosecuted/fined/sued (1) because she has not kept the data securely (1) Data held has to be protected from loss (1) so if the data is lost, an offence has occurred/Nico has to inform those whose data has been lost (that it has been lost) (1) The Information Commissioner can issue Nico with an undertaking to comply (1) to force her to improve her data security (1) The Information Commissioner can serve an assessment notice on Nico (1) and investigate her data security (1).	2	
	(c)		TWO marks available for a two part explanation: eg • Steve would need to change some of his details (candidate may exemplify) (1) because the personal data that is lost may allow access to his bank account/other named security breach (1) • Steve's account (or other eg) may get money taken out (1) as Steve's personal details allow others to impersonate him (1).	2	

OCR (Oxford Cambridge and RSA Examinations)
1 Hills Road
Cambridge
CB1 2EU

OCR Customer Contact Centre

Education and Learning
Telephone: 01223 553998
Facsimile: 01223 552627
Email: general.qualifications@ocr.org.uk

www.ocr.org.uk

For staff training purposes and as part of our quality assurance
programme your call may be recorded or monitored